

Appendix B  
Final CHART Assessment for the  
Northern California (NC) Steelhead ESU

**ESU Description**

The NC Steelhead ESU was listed as a threatened species in 2000 (65 FR 36074; June 7, 2000). The ESU includes all naturally spawned populations of steelhead in coastal river basins from Redwood Creek south to, and including, the Gualala River. Major watersheds occupied by naturally spawning fish in this ESU include Redwood Creek, Mad River, Eel River, and several smaller coastal watersheds southward to the Gualala River. Steelhead within this ESU include both winter and summer run types, including what is presently considered to be the southernmost population of summer steelhead in the Middle Fork Eel River (NMFS 1996). The half-pounder life history also occurs within the range of this ESU, specifically in the Mad and Eel Rivers. Based on an updated status review (NMFS 2003a) and an assessment of hatchery populations located within the range of the ESU (NMFS 2003b), NMFS proposed that the ESU remain listed as a threatened species and that resident O. mykiss co-occurring with anadromous populations below impassible barriers (both natural and man-made) as well as two artificial propagation programs (Yager Creek Hatchery and North Fork Gualala River Hatchery) be included in the ESU (69 FR 33102; June 14, 2004). NMFS recently determined that a 6-month extension in making a final listing determination for this and all other west coast steelhead/O. mykiss ESUs was warranted (70 FR 37219; June 28, 2005). A Technical Recovery Team has developed a preliminary model of the historic and extant population structure of this ESU. Additional technical recovery planning work is underway that will identify viability criteria for independent populations and the ESU as a whole

**CHART Area Assessments**

The preliminary CHART assessment for this ESU (NMFS 2004b) was prepared to support our December 10, 2004, critical habitat proposal (69 FR 71880). This final CHART assessment considered new information received during the public comment period regarding fish distribution and habitat use. Based on information from timber landowners on the north coast, the CHART made changes in fish distribution and habitat use in 13 watersheds (110720, 110810, 110820, 110930, 111000, 111132, 111133,

111311, 111312, 111313, 111320, 111330, 111340) that included portions of Redwood Creek, Mad River, Eel River, and the Mendocino Coast. These changes reduced the occupied habitat for this ESU by approximately 20 stream miles, but did not result in any changes in the occupancy or conservation value of Hydrologic Subareas (HSAs) within the freshwater and estuarine range of this ESU.

The final CHART assessment for the NC Steelhead ESU addressed 7 CALWATER Hydrologic Units (HUs) or subbasins containing 50 occupied HSAs (Figures B1 and B2). The HSAs were chosen as freshwater critical habitat units because they present a convenient and systematic way to organize the CHART's watershed assessments for this ESU. In addition to the 50 occupied HSA watershed units, conservation value assessments were also made for Humboldt Bay and the Eel River estuary. Information presented below for individual HUs within the range of the ESU (size, counties, total stream miles, occupied stream miles, and habitat use) were generated from GIS data sets compiled by NMFS Southwest Region and can be found in Table B1.

#### Unit 1. Redwood Creek Subbasin (HU 1107)

The Redwood Creek HU is located in the northern portion of the ESU and includes the Redwood Creek drainage. The HU encompasses approximately 294 mi<sup>2</sup> and occurs completely within Humboldt County. The HU contains 3 HSAs, all of which are occupied, and 343 stream miles (at 1:100,000 hydrography). Fish distribution and habitat use data compiled by NMFS biologists identify approximately 144 miles of occupied riverine habitat in the 3 occupied HSAs (Table B1). The CHART concluded that these occupied HSAs contained one or more PCEs (i.e. spawning, rearing, or migratory habitat) and identified several management activities that may affect the PCEs. Table B2 summarizes the total miles of occupied riverine/estuarine reaches for each HSA watershed that contain spawning/rearing, rearing/migration, or migration PCEs, as well as management activities that may affect the PCEs in each HSA. Map B1 depicts the specific areas in this HU and nested HSAs that are occupied by the ESU and were considered for critical habitat designation. The CHART did not identify any unoccupied habitat in this subbasin that may be essential for the conservation of the ESU.

#### Unit 2. Trinidad Subbasin (HU 1108)

The Trinidad HU is located in the northern portion of the ESU and includes Big Lagoon and Little River. The HU encompasses approximately 131 mi<sup>2</sup> and occurs completely within Humboldt County. This HU contains 2 HSAs, both of which are occupied, and

161 stream miles (at 1:100,000 hydrography). Fish distribution and habitat use data compiled by NMFS biologists identify approximately 69 miles of occupied riverine habitat in the occupied HSAs (Table B1). The CHART concluded that these occupied areas contained one or more PCEs (i.e. spawning, rearing, or migratory habitat) and identified management activities that may affect the PCEs. Table B2 summarizes the total miles of occupied riverine and estuarine reaches identified for each HSA watershed that contain spawning/rearing, rearing/migration, or migration PCEs, as well as management activities that may affect the PCEs in each HSA. Map B2 depicts the specific areas in this HU and the nested HSAs that are occupied by the ESU and were considered for critical habitat designation. The CHART did not identify any unoccupied habitat in this subbasin that may be essential for the conservation of the ESU.

#### Unit 3. Mad River Subbasin (HU1109)

The Mad River HU is located in the northern portion of the ESU and includes the Mad River drainage. The HU encompasses approximately 499 mi<sup>2</sup> and occurs in portions of Humboldt and Trinity Counties. This HU contains 4 HSAs, all of which are occupied, and a total of 661 miles of streams (at 1:100,000 hydrography). Fish distribution and habitat use data compiled by NMFS biologists identify approximately 169 miles of occupied riverine habitat in the 4 occupied HSAs (Table B1). The CHART concluded that these occupied areas contained one or more PCEs (i.e. spawning, rearing, or migratory habitat) and identified management activities that may affect the PCEs. Table B2 summarizes the total miles of occupied riverine and estuarine reaches identified for each HSA watershed that contain spawning/rearing, rearing/migration, or migration PCEs, as well as management activities that may affect the PCEs in each HSA. Map B3 depicts the specific areas in this HU that are occupied by the ESU and were considered for critical habitat designation. The CHART did not identify any unoccupied habitat in this subbasin that may be essential for the conservation of the ESU.

#### Unit 4. Eureka Plain Subbasin (HU 1110)

The Eureka Plain HU is located in the vicinity of Eureka, includes Humboldt Bay. The HU encompasses approximately 224 mi<sup>2</sup> and occurs completely within Humboldt County. This HU contains a single HSA which is occupied and a total of 269 miles of streams (at 1:100,000 hydrography). Fish distribution and habitat use data compiled by NMFS biologists identify approximately 123 miles of occupied riverine habitat in the occupied HSA (NMFS 2004a). The CHART concluded that these occupied areas contained one or more PCEs (i.e. spawning, rearing, or migratory habitat) for this ESU

and identified management activities that may affect the PCEs. The CHART also evaluated Humboldt Bay into which most of the freshwater streams in this subbasin drain as a separate unit. Humboldt Bay contains approximately 25 mi<sup>2</sup> of estuarine habitat which the CHART found contained PCEs for rearing and migration and concluded was of high conservation value. Table B2 summarizes the total miles of occupied riverine and estuarine habitat for the HSA that contain spawning/rearing, rearing/migration, or migration PCEs, as well as management activities that may affect the PCEs in each HSA. Map B4 depicts the specific areas in this HU that are occupied by the ESU and were considered for critical habitat designation. The CHART did not identify any unoccupied habitat in this subbasin that may be essential for the conservation of the ESU.

#### Unit 5. Eel River Subbasin (HU 1111)

The Eel River HU is located in north central portion of the ESU and includes the Eel River and Van Duzen River drainages. The HU encompasses approximately 3,682 mi<sup>2</sup> and occurs in portions of several counties including: Humboldt, Trinity, Mendocino, Lake, Glenn, Colusa, and Tehama. This HU, which is the largest in this ESU, contains 19 occupied HSAs and 5,194 miles of streams (at 1:100,000 hydrography). Fish distribution and habitat use data compiled by NMFS biologists identify approximately 1,275 miles of occupied riverine habitat in the occupied HSAs (Table B1). The CHART concluded that these occupied areas contained one or more PCEs (i.e. spawning, rearing, or migratory habitat) for this ESU and identified management activities that may affect the PCEs. Table B2 summarizes the total miles of occupied riverine habitat identified for each HSA watershed that contain spawning/rearing, rearing/migration, or migration PCEs, as well as management activities that may affect the PCEs in each HSA. Map B5 depicts the specific areas in this HU and nested HSAs that are occupied by the ESU and were considered for the critical habitat designation. The CHART did not identify any unoccupied habitat in this subbasin that may be essential for the conservation of the ESU.

#### Unit 6. Cape Mendocino Subbasin (HU 1112)

The Cape Mendocino HU is located in the central portion of the ESU and includes the Bear River and Mattole River drainages. This HU encompasses approximately 499 mi<sup>2</sup> and occurs almost entirely in Humboldt County. This HU contains 3 HSAs, all of which are occupied, and 654 miles of streams (at 1:100,000 hydrography). Fish distribution and habitat use data compiled by NMFS biologists identify approximately 340 miles of occupied riverine habitat in the 3 occupied HSAs (Table B1). The CHART concluded that these occupied areas contained one or more PCEs (i.e. spawning, rearing, or

migratory habitat) for this ESU and identified management activities that may affect the PCEs. Table B2 summarizes the total miles of occupied riverine and/or estuarine reaches identified for each HSA watershed that contain spawning/rearing, rearing/migration, or migration PCEs, as well as management activities that may affect the PCEs in each HSA. Map B6 depicts the specific areas in this HU and nested HSAs that are occupied by the ESU and were considered for critical habitat designation. The CHART did not identify any unoccupied habitat in this subbasin that may be essential for the conservation of the ESU.

#### Unit 7. Mendocino Coast Subbasin (HU 1112)

The Mendocino HU is located in the southern portion of the ESU within Mendocino and Sonoma Counties and includes several smaller streams including the Ten Mile, Noyo, Albion, Navarro, and Garcia Rivers. This HU which encompasses approximately 1,598 mi<sup>2</sup> contains 18 HSAs, all of which are occupied, and 2,103 miles of streams (at 1:100,000 hydrography). Fish distribution and habitat use data compiled by NMFS biologists identify approximately 1,028 miles of occupied riverine/estuarine habitat in the 18 HSAs (Table B1). The CHART concluded that these occupied areas contained one or more PCEs (i.e. spawning, rearing, or migratory habitat) for this ESU and identified management activities that may affect the PCEs. Table B2 summarizes the total miles of occupied riverine habitat identified for each HSA watershed that contain spawning/rearing, rearing/migration, or migration PCEs, as well as management activities that may affect the PCEs in each HSA. Map B7 depicts the specific areas in this HU and nested HSAs that are occupied by the ESU and were considered for critical habitat designation. The CHART did not identify any unoccupied habitat in this subbasin that may be essential for the conservation of the ESU.

### **CHART Final Conservation Value Ratings**

#### *Freshwater/Estuarine Areas*

After reviewing the best available scientific data regarding the distribution and habitat use of the NC Steelhead ESU, the CHART concluded that most of the occupied HSAs were of high or medium conservation value to the ESU. Of the 50 occupied HSAs that were evaluated, 27 were rated as having high conservation value, 14 were rated as having medium conservation value, and 9 were rated as having low conservation value. In addition, both Humboldt Bay and the Eel River estuary were rated as having a high conservation value. Table B3 summarizes the CHART's PCE/watershed scores and final

conservation value ratings (i.e. low, medium or high) for each HSA. Figure B8 depicts the overall spatial distribution of conservation scores for occupied HSAs within the ESU.

#### *Marine Areas*

NMFS determined that marine areas did not warrant consideration as critical habitat for this ESU.

#### **References and Sources of Information**

NMFS 1996. Status Review of West Coast Steelhead. Biological Review Team; Northwest Fisheries Science Center and Southwest Fisheries Science Center.

NMFS 2003a. Updated Status of Federally Listed ESUs of West Coast Salmon and Steelhead. West Coast Salmon Biological Review Team; Northwest Fisheries Science Center and Southwest Fisheries Science Center. July 2003.

NMFS 2003b. Hatchery Broodstock Summaries and Assessments for Chum, Coho, and Chinook Salmon and Steelhead Stocks within ESUs listed under the ESA. Salmon and Steelhead Hatchery Assessment Group/NOAA Fisheries; Northwest Fisheries Science Center and Southwest Fisheries Science Center.

NMFS 2004b. Draft Findings of NMFS's Critical Habitat Development and Review Teams (CHARTs) for 7 Salmon and O. mykiss ESUs in California. Main report and 7 appendices. Prepared by NMFS' Southwest Region.

#### **Federal Register Notices**

65 FR 36974 - Final Northern California Steelhead Listing Determination.

69 FR 33102 - Proposed Listing Determinations for 27 West Coast Salmon and Steelhead ESUs.

70 FR 37219 - 6-Month Extension of the Final Listing Determinations for 10 ESUs of West Coast Oncorhynchus mykiss.

Table B1. Northern California Steelhead ESUs: Occupancy, habitat use and area information by Hydrologic Unit and Hydrologic Subarea

ESU NUMBER	HU NAME	Major Stream / Watershed in HU	HU Occupied (Y/N)	Area in HU	Source Miles in HU	Stream Miles in HU	Occupied Stream Miles (Spawning)	Occupied Stream Miles (Rearing)	Occupied Stream Miles (Overwinter)	Counts HU Fish in HU	Area of Channel in HU	Source Miles of Channel in HU	Percent of HU in Channel	HSA NUMBER	HSA NAME	HSA Occupied (Y/N)	Area in HSA	Source Miles in HSA	Stream Miles in HSA
1107	Redwood Creek	Redwood Creek		187,972	294	343	144	138	140	138	187,972	294	100%						
														10710	Creek	Y	74,374	118	129
														10720	Preyer	Y	68,123	108	121
														10730	Lake Frazer	Y	45,465	68	94
1108	Trinidad	Maple Creek-Little River		85,640	131	161	69	52	52	50	85,640	131	100%						
														10810	Big Lagoon	Y	53,709	84	105
														10820	Little River	Y	29,931	47	56
1109	Nad River	Nad River		319,477	499	661	169	132	136	132	319,477	499	68%						
														10900	Blue Lake	Y	37,137	58	85
														10910	South Fork Nad River	Y	30,122	47	62
														10920	Butler Valley	Y	166,332	251	246
														10940	Rain	Y	91,394	144	165
1110	Gunks Plain	Jacky-Freshwater Elk River-Simon-Humboldt Bay		143,143	224	369	123	94	118	118	143,143	224	100%						
														11000	Gunks Plain	Y	143,143	224	209
1111	Elk River	Elk River-Van Dozen		2,355,918	3682	5,194	1275	1071	1221	1191	2,355,918	3682	33%						
														11111	Fendale	Y	92,968	145	202
														11112	Scout	Y	44,078	69	85
														11113	James Creek	Y	45,318	85	122
														11114	Jamesville	Y	27,317	40	42
														11115	Greenfield	Y	152,012	265	352
														11116	Wet Creek	Y	84,554	135	162
														11117	Wet Creek	Y	94,234	146	191
														11118	Redwood	Y	264,408	413	566
														11119	Laurensville	Y	30,851	126	176
														11120	Scout	Y	120,132	188	246
														11121	Scout	Y	213,822	334	418
														11122	North Fork Elk River	Y	180,319	282	380
														11123	Outlet Creek	Y	105,041	160	248
														11124	Trask Creek	Y	127,908	209	253
														11125	Lake Pillsbury	Y	253,107	349	653
														11126	Eden Valley	Y	164,031	256	365
														11127	Round Valley	Y	83,406	130	199
														11128	Black Butte River	Y	102,890	161	249
														11129	Wilderness	Y	131,377	205	253
1112	Cape Mendocino	Bear River		319,484	499	654	340	261	340	332	319,484	499	98%						
														11120	Cape	Y	14,740	23	29
														11120	Capetown	Y	66,269	104	129
														11120	Marble River	Y	238,476	372	505
1113	Mendocino Coast	Ten Miles-Noyo Bay		1,022,913	1,599	2,103	1028	837	990	943	1,022,913	1,599	83%						
														11131	Coal Creek	Y	26,835	42	52
														11132	Wages Creek	Y	27,669	59	67
														11133	Ten Mile River	Y	82,479	129	163
														11134	Noyo River	Y	105,964	166	205
														11135	Big River	Y	128,899	202	265
														11136	Albion River	Y	43,762	68	92
														11137	Navarro River	Y	201,945	316	414
														11138	Greenwood Creek	Y	20,286	32	42
														11139	Elk Creek	Y	18,069	28	44
														11140	Alder Creek	Y	27,898	44	63
														11141	Break Creek	Y	11,372	18	23
														11142	Garcia River	Y	94,443	149	208
														11143	North Fork Gualala River	Y	70,616	48	66
														11144	Rockpile Creek	Y	22,389	35	42
														11145	Backs Creek	Y	25,768	40	55
														11146	Wheatfield Fork	Y	71,443	112	162
														11147	Gualala	Y	62,348	97	128
														11148	Russian Gulch	Y	9,817	15	15

\*11163 is bisected by the ESU boundary (Scott Dam). 46,217 acres (73 square miles) lie within the ESU. 108 stream miles lie within the ESU.

Table B2. Summary of Occupied Subbasins/Watersheds, PCE's and Management Activities Affecting PCE's for the Northern California Steelhead ESU

Map Code	Basin	Watershed	Calwater Unit	Spawning/Rearing PCEs (mi)**	Rearing/Migration PCEs (mi)**	Presence/Migration Only PCEs (mi)**	Management Activities***
	Redwood Creek	Orick	110710	67	67	65	FR, FC, GM, WI, GR
	Redwood Creek	Baeaver	110720	45	45	45	FR
	Redwood Creek	Lake Prairie	110730	28	28	28	FR, WI
	Trinidad	Big Lagoon	110810	32	32	30	FR, NW
	Trinidad	Little River	110820	20	20	20	FR, AG, GR, WI, NW, FC
	Mad River	Blue Lake	110910	35	35	33	FR, RB, AG, SC
	Mad River	North Fork Mad River	110920	16	16	16	FR, AG, GR, WI
	Mad River	Butler Valley	110930	77	77	74	FR, AG, GR, SC
	Mad River	Ruth	110940	9	9	9	FR, NH
	Eureka Plain	Eureka Plain	111000	118	118	118	UR, FC, RB, TR
	Eel River	Ferndale	111111	45	45	45	AG, FC, GM
	Eel River	Scotts	111112	41	41	41	GM, FR, ES
	Eel River	Larabee Creek	111113	43	44	44	AG, FR, WI
	Eel River	Hydesville	111121	29	29	27	FR, GM, ES, WI
	Eel River	Bridgeville	111122	78	78	71	FR, ES
	Eel River	Yager Creek	111123	38	38	38	FR, AG, GR, ES
	Eel River	Weott	111131	70	70	70	FR, ES, WI
	Eel River	Benbow	111132	215	215	214	FR, UR, ES, WI
	Eel River	Laytonville	111133	82	82	82	FR, UR, ES, NW
	Eel River	Sequoia	111141	61	61	57	FR, UR, NH
	Eel River	Spy Rock	111142	96	96	85	AG, FR, ES, NH
	Eel River	North Fork Eel River	111150	85	85	74	AG, GR, WI, ES, PO
	Eel River	Outlet Creek	111161	83	83	83	UR, FR, WI, NW
	Eel River	Tomki Creek	111162	88	88	84	FR, WI, NW
	Eel River	Lake Pillsbury	111163	25	25	25	ES, NH, NW
	Eel River	Eden Valley	111171	45	64	53	FR, GR, WI
	Eel River	Round Valley	111172	37	46	34	AG, FR, WI
	Eel River	Black Butte River	111173	30	30	30	FR, GR, WI
	Eel River	Wilderness	111174	38	38	35	FR, PO
	Cape Mendocino	Oli Creek	111210	12	12	12	GR, FR
	Cape Mendocino	Capetown	111220	67	67	67	AG, GR, FR, WI
	Cape Mendocino	Mattole River	111230	261	261	254	FR, AG, GR, WI
	Mendocino Coast	Usal Creek	111311	20	20	20	FR, RB
	Mendocino Coast	Wages Creek	111312	39	39	34	FR, RB, NW
	Mendocino Coast	Ten Mile Creek	111313	96	86	86	FR, GR, PO
	Mendocino Coast	Noyo River	111320	129	130	120	FR, UR, NW
	Mendocino Coast	Big River	111330	161	161	151	FR, PO, WL
	Mendocino Coast	Albion River	111340	58	58	55	FR, UR, NW
	Mendocino Coast	Navarro River	111350	179	181	176	FR, AG, WI
	Mendocino Coast	Greenwood Creek	111361	10	10	10	FR
	Mendocino Coast	Elk Creek	111362	7	7	7	FR
	Mendocino Coast	Alder Creek	111363	7	7	7	FR, GR
	Mendocino Coast	Brush Creek	111364	13	13	13	FR, AG
	Mendocino Coast	Garcia River	111370	76	76	73	FR, AG, WI
	Mendocino Coast	North Fork Gualala River	111381	29	29	22	FR, RB, NW
	Mendocino Coast	Rockpile Creek	111382	10	10	10	FR, RB
	Mendocino Coast	Buckeye Creek	111383	26	26	26	FR, AG



Map Code	Basin	Watershed	Calwater Unit	Spawning/Roaring PCEs (mi)**	Rearing/Migration PCEs (mi)**	Presence/Migration Only PCEs (mi)**	Management Activities***
	Mendocino Coast	Wheatfield Fork	111384	71	71	71	FR, AG
	Mendocino Coast	Gualala	111385	67	67	61	GM, GR, RB
	Mendocino Coast	Russian Gulch	111380	4	4	4	GR

\*Total Stream Miles calculated from blue-line streams represented on 1:100,000 USGS Topographic Maps

\*\*Overlap of stream miles may occur between the three habitat types.

\*\*\*Management Activities Codes:

AG - Agriculture	NW - Non-agriculture Withdrawals / Impoundments
CM - Channel Modification	PO - Poaching
ES - Exotic / Invasive Species	RB - Road Building / Maintenance
FC - Flood Control Channel	SP - Septic System Failure / Containment
FR - Forestry	TR - River, Estuary, Ocean Traffic
GM - Sand and Gravel Mining	UR - Urbanization
GR - Grazing	WI - Agriculture Withdrawals / Impoundments
HD - Hydroelectric Dam	WL - Wetland Loss / Removal
NH - Non-hydro Dam	

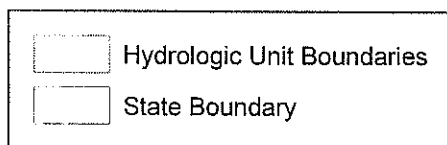
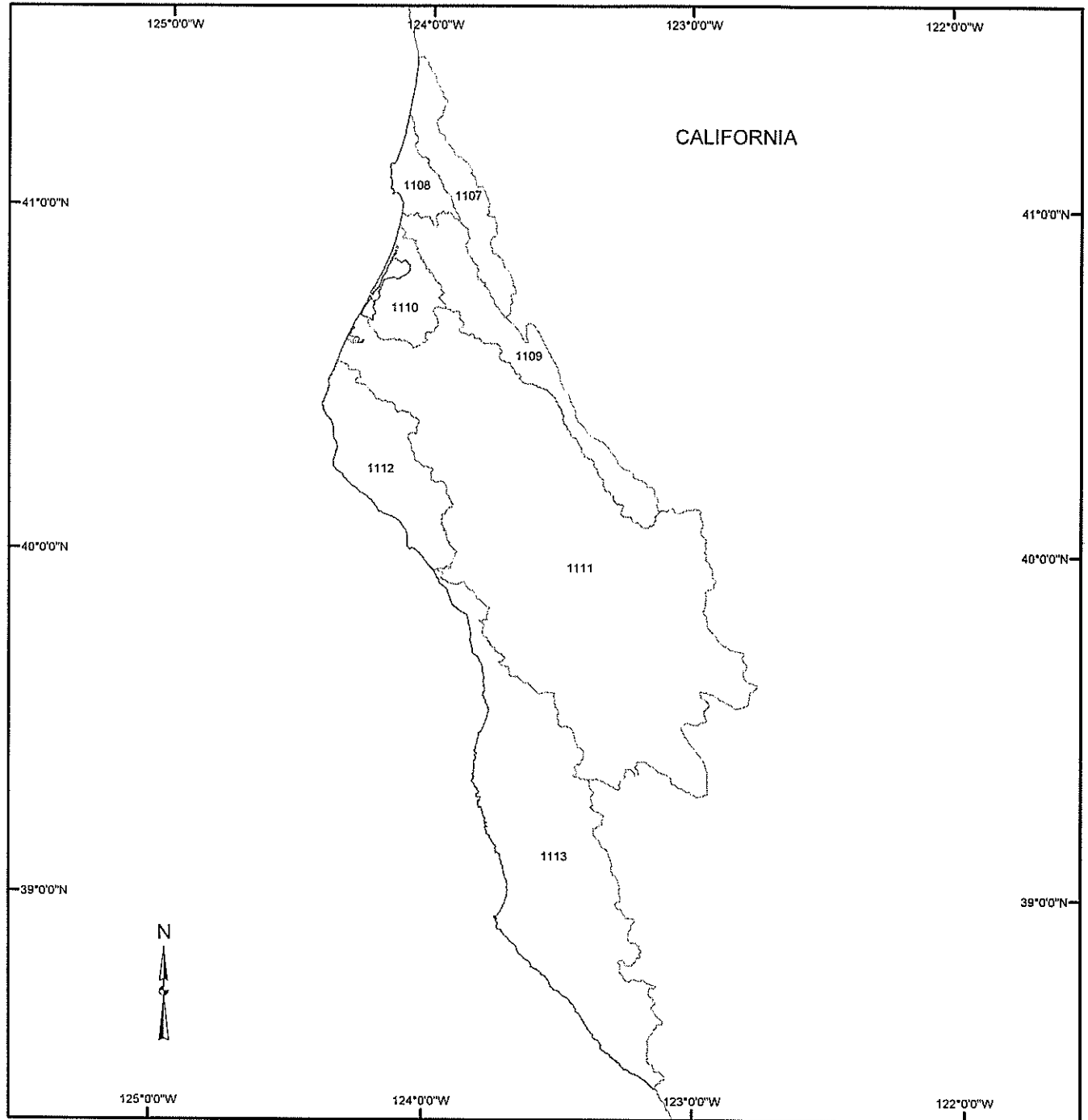
Table B3. Summary of Scores and Overall Rankings of Conservation Values for Critical Habitat for HSA watersheds occupied by the Northern California Steelhead ESU

Map Code	Basin	Watershed	Calwater Unit	Total Score (0-18)	Comments / Other Considerations	Conservation Value
	Redwood Creek	Orick	110710	13		High
	Redwood Creek	Baeaver	110720	13		High
	Redwood Creek	Lake Prairie	110730	12		Medium
	Trinidad	Big Lagoon	110810	10		Low
	Trinidad	Little River	110820	13		High
	Mad River	Blue Lake	110910	13		High
	Mad River	North Fork Mad River	110920	14		High
	Mad River	Buller Valley	110930	12		High
	Mad River	Rulh	110940	10		Low
	Eureka Plain	Eureka Plain	111000	14		High
	Eel River	Ferndale	111111	11		Medium
	Eel River	Scolia	111112	12		Medium
	Eel River	Larabee Creek	111113	14		High
	Eel River	Hydesville	111121	13		High
	Eel River	Bridgeville	111122	12		Medium
	Eel River	Yager Creek	111123	11		Medium
	Eel River	Weott	111131	13		High
	Eel River	Benbow	111132	14		High
	Eel River	Laytonville	111133	14		High
	Eel River	Sequoia	111141	12		Medium
	Eel River	Spy Rock	111142	11		Medium
	Eel River	North Fork Eel River	111150	11		Medium
	Eel River	Outlet Creek	111161	13		High
	Eel River	Tomki Creek	111162	13		High
	Eel River	Lake Pillsbury	111163	12		Medium
	Eel River	Eden Valley	111171	12		High
	Eel River	Round Valley	111172	11		Medium
	Eel River	Black Butte River	111173	12		High
	Eel River	Wilderness	111174	14		High
	Cape Mendocino	Oil Creek	111210	10		Low
	Cape Mendocino	Capetown	111220	10		Low
	Cape Mendocino	Mattole River	111230	14		High
	Mendocino Coast	Usal Creek	111311	11		Medium
	Mendocino Coast	Wages Creek	111312	11		Medium
	Mendocino Coast	Ten Mile Creek	111313	13		High
	Mendocino Coast	Noyo River	111320	13		High
	Mendocino Coast	Big River	111330	13		High
	Mendocino Coast	Albion River	111340	12		Medium
	Mendocino Coast	Navarro River	111350	14		High

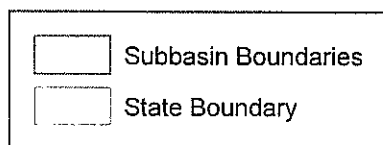
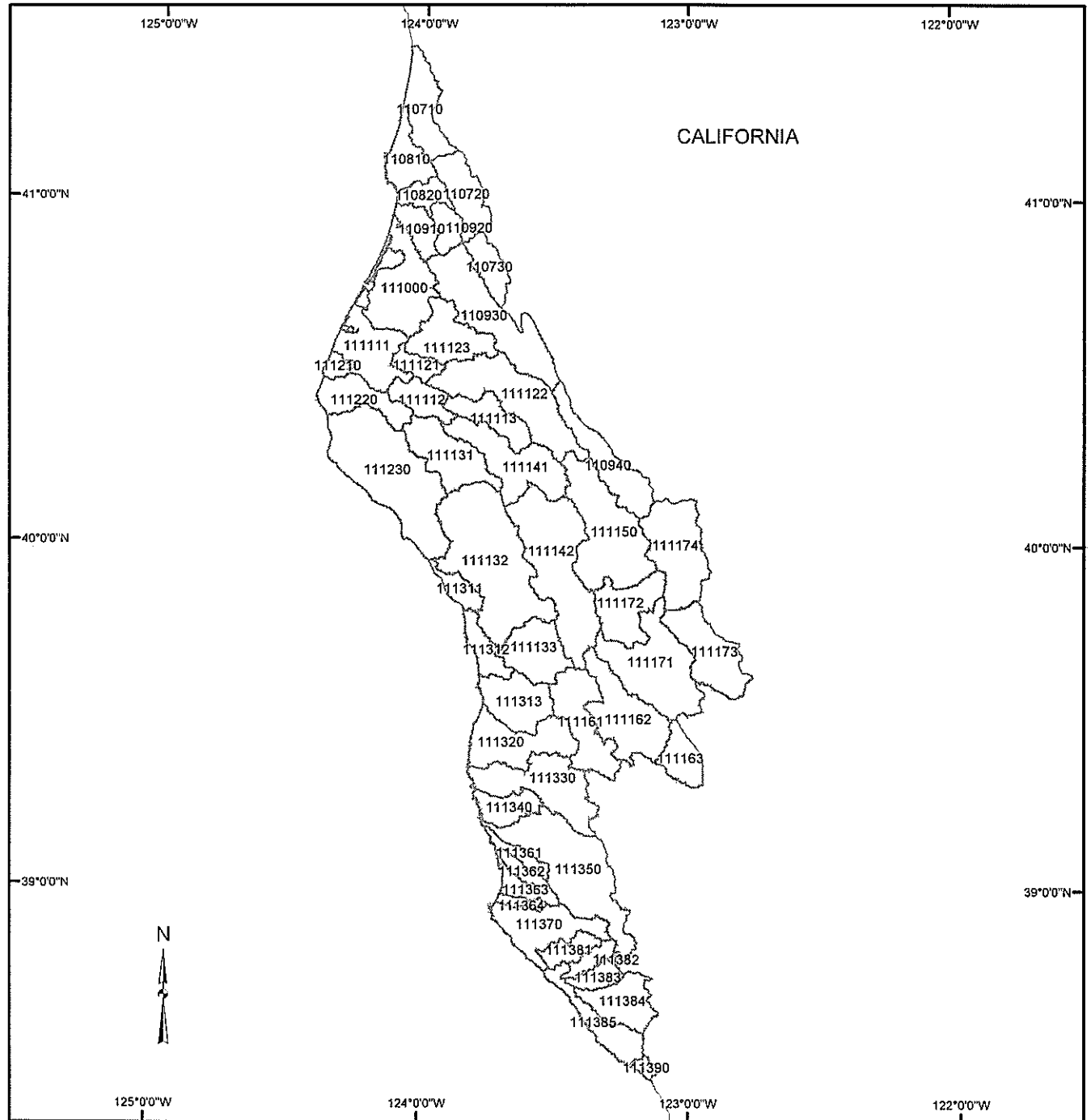
	Mendocino Coast	Greenwood Creek	111361	10		Low
	Mendocino Coast	Elk Creek	111362	10		Medium
	Mendocino Coast	Alder Creek	111363	9		Low
	Mendocino Coast	Brush Creek	111364	10		Low
	Mendocino Coast	Garcia River	111370	13		High
	Mendocino Coast	North Fork Gualala River	111381	13		High
	Mendocino Coast	Rockpile Creek	111382	10		Low
	Mendocino Coast	Buckeye Creek	111383	12		High
	Mendocino Coast	Wheatfield Fork	111384	13		High
	Mendocino Coast	Gualala	111385	13		High
	Mendocino Coast	Russian Gulch	111390	7		Low
	Outside ESU	Lake Pillsbury	111163			High

Figures B1 and B2: CALWATER Hydrologic Units and Hydrologic Subareas within the Range of the NC Steelhead ESU.

# Map of the Northern California Steelhead ESU



# Map of the Northern California Steelhead ESU



Maps B1 through B7: Northern California Steelhead ESU - Occupied Habitat Areas  
(Units) Considered for Critical Habitat Designation

B1 - Unit 1107 (Redwood Creek)

B2 - Unit 1108 (Trinidad)

B3 - Unit 1109 (Mad River)

B4 - Unit 1110 (Eureka Plain)

B5 - Unit 1111 (Eel River)

B6 - Unit 1112 (Cape Mendocino)

B7 - Unit 1113 (Mendocino Coast)